

QUERCUS DURANDII, Buckley.

BY S. B. BUCKLEY, PH. D.

I had spent several years in studying the trees of the United States in their native places, when, in the month of September, 1859, as I was walking from Camden to Allenton, in Wilcox County, Alabama, I saw an oak, different from any I had ever seen. It was in a dark, rich, limestone soil, on the right hand side of the road, about three miles from Allenton. The bark of its trunk and limbs was scaly; leaves lanceolate, entire or slightly lobed or repand; acorns small, ovate, obtuse; cup very shallow, about one-eighth as long as the acorn. The tree was 1 foot in diameter and about 25 feet high, and the only one there. I showed specimens of it to the gentleman with whom I staid all night. He told me it was a rare oak in that country, growing near the banks of streams and swamps, that its wood was close grained and very tough, making excellent screws for cotton-gins, firm and durable wagon-hubs, etc., also splints for making baskets for the cotton-field, when the cotton is being gathered; that it was seldom more than 3 feet in diameter and 60 feet high.

This oak was the *Quercus Durandii*, a new species which I described in the Proceedings of the Academy of Natural Sciences in 1861. It is named after the late Elias Durand, who was for many years chairman of the Committee on Botany of the Academy.

In October, 1859, I saw it again at Shreveport, in Louisiana, on the bluffs of the Red River, in the upper part of the town. There its acorns were larger and longer than in Alabama. Here there were several trees of it, one of which was 4 feet 2 inches in diameter at 3 feet from the ground. These were low, spreading trees, growing in an open space.

In Southern Texas, on the Colorado River, in Fort Bend and other counties, it is a large tree, often 2 to 3 feet in diameter and 60 to 70 feet high.

In 1874, in Milam County, Texas, I saw many large, tall trees of this oak in the bottom lands of Little River, a tributary of the Brazos. There it is sometimes called the "bastard white oak" because the bark of its trunk resembles that of the scaly forms of white oak.

Durand's oak grows on the banks of Shoal Creek, one-half to

two miles above Austin, also near Mount Bond, about three miles from the city.

In 1872, Mr. Elihu Hall, of Athens, Illinois, was at Austin collecting plants. I showed him Durand's oak, which is referred to as a good species in his "*Plantæ Texanæ*," published in 1873.

Mr. Charles Mohr, Botanist for the Tenth Census Department of Forestry in the Gulf States, was here, last November, and obtained sections of the wood, and specimens of the leaves and acorns of *Q. Durandii* for the Department of Forestry under the direction of Prof. Chas. S. Sargent, for the United States Government.

Lastly, Prof. Sargent came here three weeks ago, and together we visited the banks of Shoal Creek, where there were several small trees of this oak, the largest being nearly two feet in diameter. He was satisfied it was a good species.

I have been thus particular in giving the history of this oak to the present time, because all who have seen the living trees regard it as a good species, which is not the case with some who have not. In Dr. Engelmann's "*Oaks of the United States*," published at p. 392, "*Transactions of St. Louis Academy*," speaking of the forms of *Quercus undulata*, he says: "The var. *Gambelii* runs into variety *Gunnisonii* on one side, and on the other into variety *breviloba* (*Q. obtusiloba* var. *brevifolia*, Torrey, Bot. Bound. and probably *Q. Durandii* and *San sabei*, Buckley)." Dr. E. thus regards it as probably identical with a marked variety of *Quercus undulata*, an opinion which a better acquaintance with living trees would surely lead him to revise. Without extensive field experience it is almost impossible to decide on the limits of species in oaks, as well as in grapes and other difficult genera.